

AF/ 12700

**TRANSMITTAL LETTER
(General - Patent Pending)**

Docket No.
112857-00099

In RE Application Of: Ryoichi Shimizu

Serial No.	Filing Date	Examiner	Group Art Unit
08/883,322	June 26, 1997	T. Tran	2615

Title:

SELECTABLE RECORDING FRAME RATE VIDEO TAPE RECORDER

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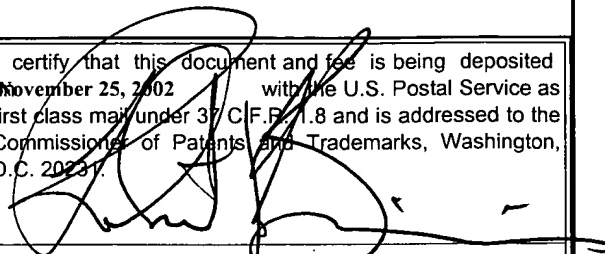
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Dated: November 25, 2002

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant(s): Ryoichi Shimizu
Appl. No.: 08/883,322
Filed: June 26, 1997
Title: SELECTABLE RECORDING FRAME RATE VIDEO TAPE RECORDER
Art Unit: 2615
Examiner: T. Tran
Docket No.: 112857-099

Assistant Commissioner for Patents
Washington D.C. 20231

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APPLICANT'S REPLY BRIEF

Technology Center 2600

Sir:

The present reply brief is in response to the Examiner's answer mailed September 23, 2002. The Examiner maintains his rejection of all of the pending claims under 35 U.S.C. §103(a) based on the combined teachings of Suzuki (U.S. Patent No. 6,104,858) and Okauchi (U.S. Patent No. 5,229, 890). The Examiner's argument against patentability are somewhat unclear. From the bottom of page 8 to the top of page 10 of the Examiner's answer the Examiner apparently argues that the claims of the present application and the supporting disclosure of the specification do not require that both drop-frame and non-drop frame time codes be recorded simultaneously ("together") with the selected frame rate. Then, from page 10 through page 11 the Examiner apparently argues that the combination of Suzuki and Okauchi teach just that. Appellant will address both issues in the instant reply.

First, taking claim 1 as an example, a video tape recorder according to the present invention includes, among other things, means for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate. The conjunctive work "and" between the first time code and the

second time code indicates that both are recorded “together” with the selected recording frame. This reading of the claim is fully consistent with the specification.

At page 1 lines 9-12 the specification states that “the present invention relates to a video tape recorder that can simply and efficiently determine a recording mode by simultaneously recording both recording frame rate information and different types of time code information.” At page 7 lines 17-19 the specification states “in the present invention, playback time code information of both NDF [non-drop frame] and [drop frame] formats are simultaneously recorded in addition to the recording of recording frame rate information used in a recording mode.” At page 9 line 24 through page 10 line 2 the specification states “the time code generator (TCG) 13 outputs code information about both a time code (corresponding to a time code stepped in a drop frame) for the setting of DF and a time code (corresponding to a time code stepped in a non-drop frame) for the setting of NDF. This output is independent of whether the controller 19 has selected a DF switch setting for a NDF switch setting. These time codes are recorded on the helical track. (Emphasis added). The above quoted passages from the specification leave no room for doubt but that the Applicant’s reading of the claims is correct. The claims call for either means for, steps of, and circuits which record both drop-frame and non-drop frame time codes together with the selected recording frame rate. Neither Suzuki nor Okauchi teach or suggest this feature.

According to the Examiner, Suzuki discloses a video tape recorder capable of signal recording and reproducing process at a plurality of different frame rates having means for recording an input image signal at a selected frame rate. The Examiner admits that Suzuki does not disclose means for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate.

For this the Examiner relies on Okauchi who, according to the Examiner, teaches a data recording system for use in a videotape recorder having means for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate so that the time code in recording is coincident with the real time according to the CTL coding system. However, Okauchi does not in fact teach or suggest means for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop-frame together with the selected frame rate on the recording medium. Rather Okauchi teaches a data recording system in which dummy bits are provided in a code frame in order to correct the time deviation of the time code in a CTL coding system. In the case of NTSC, 10 dummy bits are added to a 50-bit code block to achieve coincidence with real time. According to the drop frame mode, 2 dummy bits are dropped at the start of each minute other than every tenth minute. (Co. 3 Lines 1-27). Of the 8 or 10 dummy correction bits, the initial bit is for distinguishing between a correction mode and a non-correction mode. When the initial bit is 0 the non-drop frame mode is selected and time deviation correction is not performed. When the initial bit is 1 drop frame mode is selected and code correction is performed such that the number of dummy bits is 8 at every minute on the minute, except at every tenth minute (Col. 3 Lines 45-55).

It would be clear to one of ordinary skill in the art that a bit can take on only one of two different states at a given time, 1 or 0. Thus, the initial dummy bit must be either a 1 or a 0 at any given time. Therefore, only one of the drop frame mode or the non-drop frame mode may be selected at a given time. Okauchi does not disclose any provisions for recording both drop frame and non-drop frame codes simultaneously.

From the same passages of Okauchi quoted above, the Examiner draws the conclusion that "for the selected frame rate (NTSC, 39.97 frames per second), two types of time codes (non-drop frame mode, 10 dummy bits, and drop frame mode, 8 dummy bits) are sequentially recorded together with the selected frame rate on the video tape as required by claim 1." This conclusion mischaracterized the operation of Okauchi. In non-drop frame mode (when the first dummy bit is 0 there is no correction and every frame includes 10 dummy bits. When the first dummy bit is 1 drop frame mode is selected. In this mode there are still 10 dummy bits, except for those frames occurring on the minute every minute except every tenth minute. (See Col. 3 Lines 15-27). The fact that some frames will have 10 dummy bits and others will have 8 does not indicate that both drop frame and non-drop frame time codes have been recorded as suggested by the Examiner. To the contrary, it indicates only that drop frame time codes have been recorded.

Further, the Examiner argues that even if Okauchi does not specifically disclose the capability of recording both drop frame and non-drop frame time codes along with the selected frame rate, the user can operate a manual switch disclosed in Col. 5 Lines 9-14 of Okauchi to record both drop frame and non-drop frame coded pulses together with the selected recording frame rate. With all due respect to the Examiner, this argument simply does not make logical sense. The relevant passage in the Okauchi specification states "...a drop frame/non-drop frame switching signal supplied to both the digital time 1 and encoder 3 is a signal which assumes one of H (High Level) and L (Low Level) by selection through a manual switch." Drop frame mode or non-drop frame mode is selected in accordance with the drop-frame/non-drop frame switching signal. Rather than teaching that a user may record both drop-frame and non-drop frame time

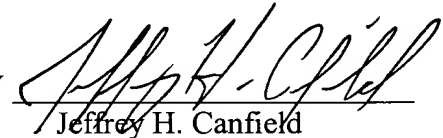
codes simultaneously, the manual switch actually teaches a manual selection between the recording of drop-frame and non-drop frame time codes.

The Examiner's arguments notwithstanding Okauchi simply does not teach or suggest recording drop frame and non-drop frame time codes simultaneously with the selected recording frame rate. Thus, even when Suzuki and Okauchi are combined they fail to teach or suggest every element of the claimed invention. Since the combined references cited by the Examiner fail to teach or suggest every element of the claimed invention, the Patent Office has failed to establish prima facie obviousness and the rejection of claim 1-14 under 35 U.S.C. §103 is improper and should be reversed by this Board.

Respectfully submitted,

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